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# ***Skill Procedures:***

## ***Intravenous Infusion***

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### ***I. Usage***

1. Intravenous access is one of the most common procedures performed by advanced life support providers. It provides an access for medication administration, as well as a route for volume replacement.

### ***II. Indications***

1. Any patient who is in need of IV medication.
2. Any patient who is in need of fluid replacement.



### ***III. Contraindications***

1. If possible use an extremity that is not injured or fractured.

### ***IV. Procedural Protocols***

1. Explain the procedure to the patient.
2. Select an IV site, and attach tourniquet proximal to the site.



**Note Well:** *The scalp is an excellent site in newborns for IV insertion. In infants, the hands, antecubital fossa and saphenous vein at the ankle or feet are also good sites for access.*

3. Prepare the site with an antiseptic solution.
4. With the bevel of the needle pointing upward, pass the needle through the skin.

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#### ***IV. Procedural Protocols (continued)***

5. Advance the needle toward the vein. When the needle enters the vein, a pop will be felt.
  - A. There should be blood in the flashback chamber.
6. Advance the needle approximately 2-3 millimeters to be certain the needle is in the vein.
7. Slide the catheter over the needle into the vein.
8. If necessary, draw blood at this time.
9. Attach IV tubing and release tourniquet.
10. Check flow of fluid. If adequate, secure catheter to skin and tape down IV tubing.



#### ***V. Notes***

1. Several complications are associated with IV therapy. They include
  - A. Local Infiltration
    - i. This is a common occurrence. When it occurs discontinue the infusion of fluid. Remove the needle and/or catheter from the site.

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#### ***V. Notes (continued)***



##### **B. Catheter Sheer**

- i. This primarily occurs when the catheter has been advanced, and then the needle is advanced or the catheter is withdrawn over top of the needle. This results in the catheter sheering over the sharp edge, releasing a plastic embolus into the blood stream.
- ii. To prevent this, never pull the catheter back. If it is necessary to remove the catheter, first withdraw the needle completely. Once the needle is removed, then withdraw the catheter.

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